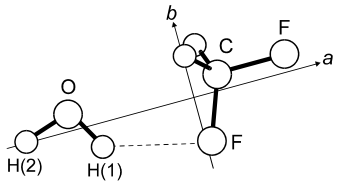
129 **CH_4F_2O** **Difluoromethane – water (1/1)** **C_s**
MW (weakly bound complex) (effective symmetry class)
(large-amplitude motion)
$CH_2F_2 \cdot H_2O$

r_0	Å
F...H(1) [a])	2.20(1)

θ_0	deg
F...H(1)–O [a])	135(3)
C–F...H(1) [a])	93(1)



Atom	$\|a_s\|$ [Å]	$\|b_s\|$ [Å]	$\|c_s\|$ [Å]
O	2.480	0.341	0.09
H(1) [a])	2.128	0.09	0.24
H(2) [b])	3.290	0.32	0.02

The water molecule lies in the FCF plane of difluoromethane, linked through an O–H...F hydrogen bond to one fluorine atom, and opposite to the second one.

[a]) The hydrogen of the water, which is involved in the hydrogen bond.
[b]) The hydrogen of the water, which is free from the hydrogen bond.

Caminati, W., Melandri, S., Rossi, I., Favero, P.G.: J. Am. Chem. Soc. **121** (1999) 10098.